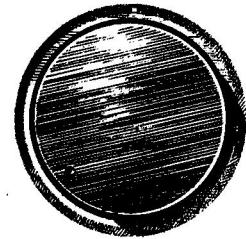


KENWOOD



L-A1 Instruction Manual
INTEGRATED AMPLIFIER

Introduction

Thank you for buying the Kenwood L-A1 integrated amplifier.

Please read this manual carefully to ensure that you get the greatest possible use and satisfaction from your amplifier.
Keep this manual in a safe place for future reference.

Contents

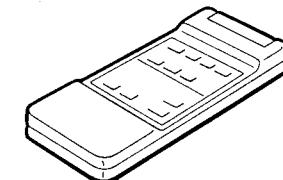
Caution: Read the pages marked  carefully to ensure safe operation.

 Before applying power	3
 Safety precautions	3
 Important safeguards	4
About your new Kenwood L-A1 amplifier	6
How to set up your new amplifier	8
Names of parts	10
Stand by mode of POWER switch	
How to use the remote control	11
Inserting the batteries	
Operating the remote control	
How to use the amplifier	12
Listening through the main source	
Playing records	
Listening through headphones	
Muting the sound	
How to record music	14
Selecting a music source for recording	
Listening to a second music source while recording	
Monitoring Recording	
Dubbing music	
Listening to a second music source while dubbing	
Troubleshooting	18
Block diagram	19
Characteristics charts	20
Specifications	21

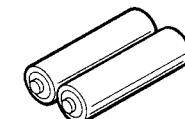
Accessories

Make sure that all accessories are put aside so they will not be lost.

Remote control (1)



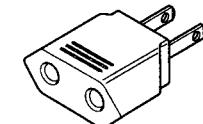
AA dry batteries (R6/SUM-3) for use with the remote control (2)



Shorting pins (2)



AC plug adaptor (1)
(Except for some areas)
For the unit with a European AC plug in areas other than Europe.



Before applying power

For Europe

Important!

Units shipped to Europe are designed for operation on 230 V AC only.

For the United Kingdom

Important!

Units shipped to the U.K. are designed for operation on 240 volts AC only.

The mains plug must be removed from the wall socket prior to any internal examination.

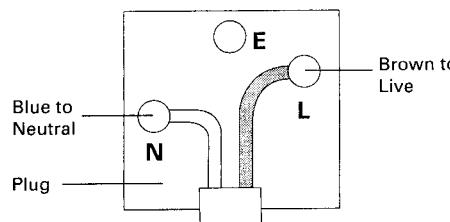
The wires in this mains lead are coloured in accordance with the following code:

Blue Neutral
Brown Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

Wire colour

Blue N or Black
Brown L or Red



Notes:

1. If a 13-amp plug is used, this must be fitted with a 13-amp fuse.
2. If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

Caution: Read this page carefully to ensure safe operation.

For other countries

Important!

Units shipped to countries not specified on the left-hand side are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC voltage selection

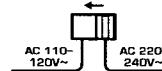
This unit operates on 110 - 120 or 220 - 240 volts AC. The AC voltage selector switch Type A or Type B on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

Note:

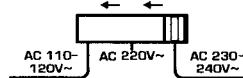
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

AC voltage selector switch

Type A



Type B



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

Safety precautions

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
			THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.
			THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

Important safeguards

 Caution: Read this page carefully to ensure safe operation.

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

1. **Power sources** – The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
2. **Power-cord protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
3. **Grounding or polarization** – The precautions should be taken so that the grounding or polarization means of this unit is not defeated.
4. **Ventilation** – The unit should be situated so that its location or position does not interfere with its proper ventilation.
To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls. Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.
5. **Water and moisture** – The unit should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. **Temperature** – The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).
7. **Heat** – The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.
8. **Electric shock** – Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.
9. **Enclosure removal** – Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.
10. **Magnetic fields** – Keep the unit away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.
11. **Cleaning** – Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.
12. **Carts and stands** – An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Note:

Item 3 is not required except for grounded or polarized equipment.

13. Nonuse periods – The power cord of the unit should be unplugged from the outlet when left un-used for a long period of time.

14. Abnormal smell – If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service center.

15. Damage requiring service – The unit should be serviced by qualified service personnel when:

- A.** The power-supply cord or the plug has been damaged; or
- B.** Objects have fallen, or liquid has been spilled into the unit; or
- C.** The unit has been exposed to rain; or
- D.** The unit does not appear to operate normally or exhibits a marked change in performance; or
- E.** The unit has been dropped, or the enclosure damaged.

16. Servicing – The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

17. AC outlets – Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.

Strömbrytarens POWER beredskapsläge

Indikatorn STAND BY tänds efter nätkabelns anslutning till ett vägguttag, oavsett strömbrytarens POWER till/frånslag. Detta anger att en liten mängd ström leds till komponenten som stöd för minnesinnehållet. Detta läge kallas för beredskapsläget. Strömbrytaren på fjärrkontrollen kan användas för att slå på och av strömmen så länge indikatorn STAND BY lyser.

Virtanäppäimen (POWER) valmiustila (STAND BY)

Kun laitteen verkkojohto on liitetty pistorasiaan, valmiustilan merkkivalo sytyy riippumatta virtanäppäimen (POWER) asennosta (ON/OFF). Merkkivalo osoittaa, että laitteessa on hieman virtaa muistin sisältöjen ylläpitoa varten. Tätä tilaa kutsutaan valmiustilaksi. Kun valmiustilan merkkivalo (STAND BY) palaa, laitteen virta voidaan kytkeä ja katkaista kaukosäätimellä.

Afbrydertastens (POWER) STAND BY funktion

Når apparatets strømledning er tilsluttet en stikkontakt, lyser STAND BY indikatoren, uanset om der er tændt ved afbryderen på apparatet eller ej. Det angiver, at apparatet bliver forsynet med en ganske lille mængde strøm til opret-holdelse af hukommelsens indhold. Denne funktion kaldes STAND BY. Når STAND BY indikatoren er tændt, kan strømmen til apparatet slås til og fra med fjernstyringsenheden.

PÅ/AV-knappens Stand-by funksjon

När strømledningen til dette anlegget er satt i en vekselstrømskontakt, vil STAND-BY indikatorlampen lyse enten PÅ/AV-knappen er på-eller avslått. Dette betyr at en viss mengde strøm tilføres anlegget slik at innholdet i minnet ikke går tapt. Denne funksjonen kalles Stand-by. Når indikatorlampen for STAND-BY er tent, kan strømmen slås PÅ/AV fra fjernkontrollen.

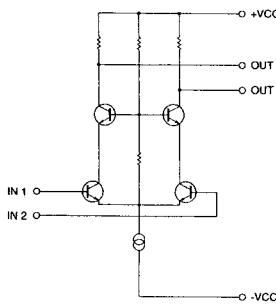
About your new Kenwood L-A1 amplifier

Improved dynamic signal to noise ratio

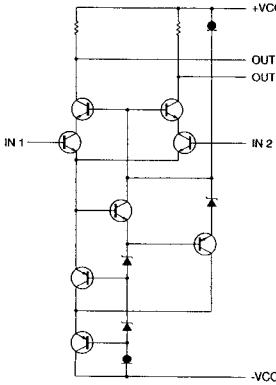
- Super C⁴

All amplifier circuits in the Kenwood L-A1 amplifier use our newly developed Super C⁴ circuits (Super Constant Current Cascade Circuit). While most amplifiers use differential amplifier circuits, in designing the Super C⁴ we focused on a new way of reducing the in-phase noise normally suppressed by using the common-mode rejection ratio (CMRR) inherent to differential amplifiers. The result was a dramatic reduction in the noise generated in the first stages of the amplifier circuits.

Ordinary design

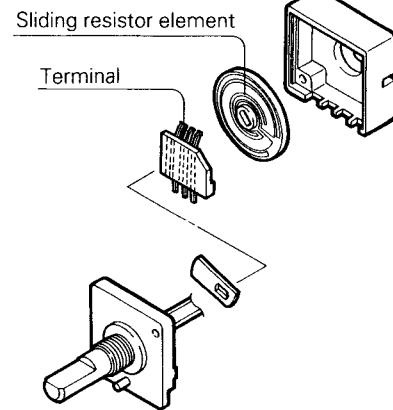


L-A1



• Revolving resistor volume

The master volume of the L-A1 amplifier uses a newly developed large-scale (type 32) revolving resistor volume. While ordinary volumes have a slider that moves over the resistor, the slider in the L-A1 is fixed over the volume while the resistor is rotated. This design eliminates the connection formerly created by crimping between the printed circuit board and the resistor and allows the amplifier to deliver better sound. This revolving resistor design also makes it possible to realize special variant control characteristics which in turn made it possible for us to use a master volume with the unbelievably low impedance of 1k Ω . This gives you the low impedance you need in actual use, and reduces the noise generated from the volume and main amplifier to the barest minimum.

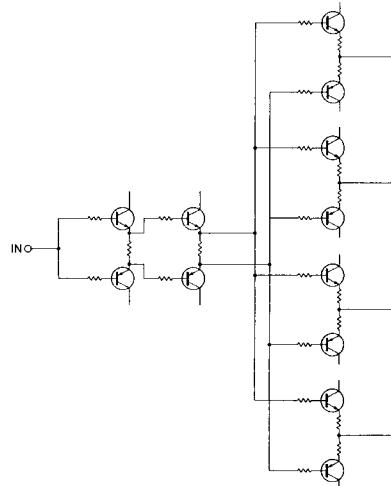


All the power you need and more

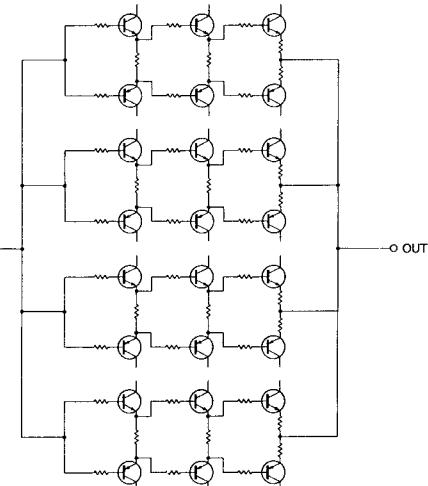
• Multiple-driver system

The power amplification system uses four parallel push-pull circuits with large-scale transistors (Pc=120W), which make it possible for the L-A1 to produce strong output even when the impedance of speaker systems has fallen low at some frequencies. In ordinary parallel push-pull circuits, only the power transistors in the final stage are connected in parallel, while all other driver transistors in the previous stage are used in common. The multi-driver system used in the L-A1, however, includes a group of driver transistors for each group of power transistors in a design that connects four groups of Darlington circuits in true parallel. This circuit structure reduces the load on individual transistors, making it possible to gain a stable circuit operation with sufficient current and less heat.

Ordinary design



L-A1



- **VIG circuits**

The power amplification system also uses voltage interface gate (VIG) circuits which ensure a clean source of power for your L-A1 free of impurities such as ripples, load fluctuation, or other intermodulation distortion. From the point of view of the power amplification system, this results in the same benefits as would be gained from a far more powerful power system.

- **A heatsink design that separates the final and driver transistors**

The large-scale heatsink with a 7 mm thick base is used in the power amplifier was designed, and makes it possible to stand up to even loads of 2Ω . By laying out the final and driver transistors separately on both sides of the heatsink, it doubles as a shield to prevent interference between the large and low current systems.

- **A high-capacity toroidal transformer**

The Kenwood L-A1 uses a toroidal transformer that gives off very little magnetic leakage and responds well to load fluctuation. Combined with aluminum electrolytic capacitors and with a capacity of as much as 450VA per transformer, these transformers give you all the power you need—and more.

A sturdy, rigid cabinet design

- **Separated blocks for a sturdy, rigid design**

The cabinet of the Kenwood L-A1 uses a frame design composed of 2 mm thick steel plates held together with 4 mm screws for the kind of rigidness you don't often find. By making the cabinet tough, we've created a sturdy, solid foundation that assures you of a deep, rich sound. By adopting a frame design where individual parts are assembled together into a single cabinet, we have been able to separate blocks such as the main and subsidiary power units, the input unit, and the power supply in order to prevent interference between individual components.

- **A glass epoxy circuit board**

In keeping with our aim of making the cabinet sturdy and rigid, we have also used a glass epoxy circuit board for the printed board of the Kenwood L-A1 amplifier. Glass epoxy offers excellent characteristics and lasts for years. And as a material, glass offers better rigidity than the phenol resins normally used in audio equipment.

As a final touch, the board has been firmly fixed into the frame with solid steel studs.

Other features

- **MC/MM dual-head equalizer**

Phono cartridges come in either MM or MC types. To make the best of both, the Kenwood L-A1 uses a dual-head equalizer. Although dual head equalizers are gain-switching equalizer amplifiers, by offering a dedicated first-stage for MM and MC circuits, they give you all the benefits of a dedicated equalizer amplifier.

- **Quality machined and extruded parts**

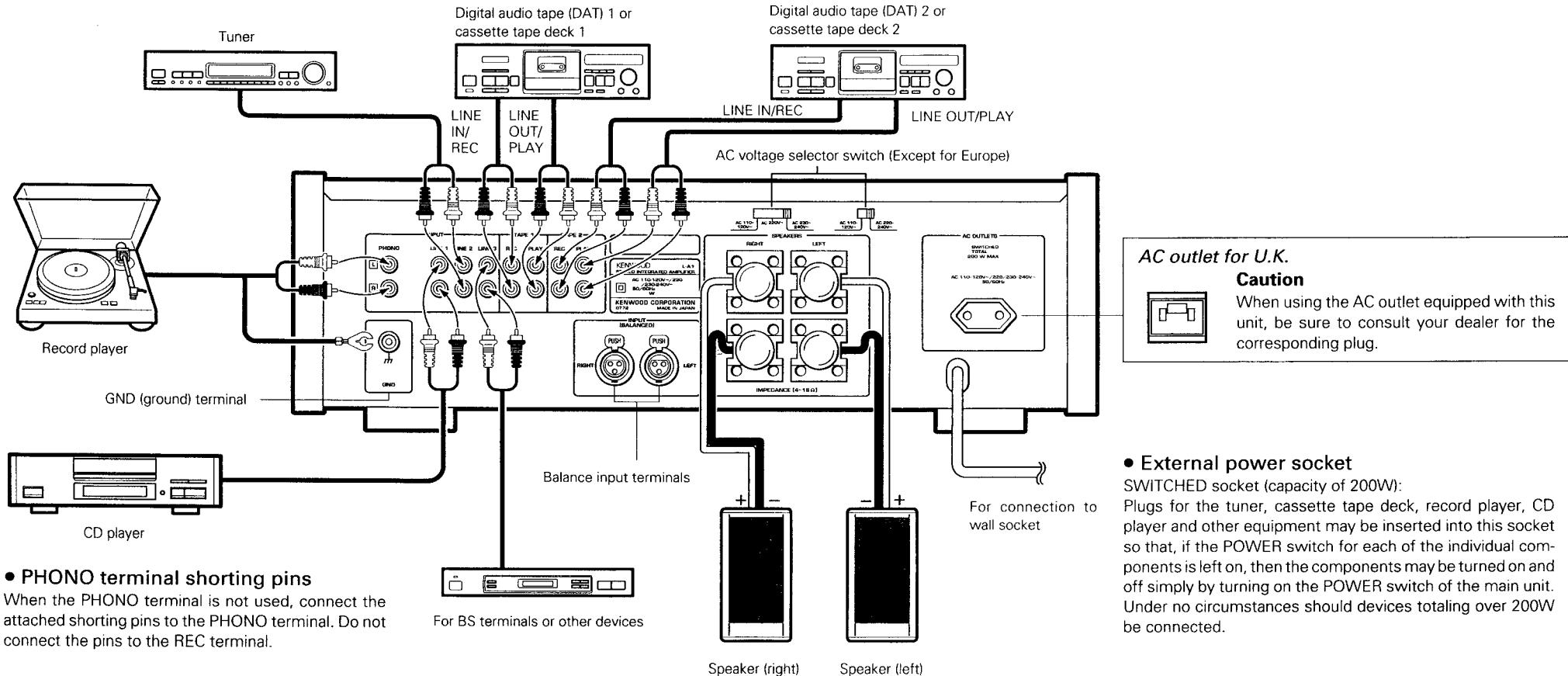
All parts, such as panels, knobs and jacks, etc. have been either precision-machined or extruded to give you sure control and the high degree of reliability you need.

How to set up your new amplifier

Connect your equipment to the amplifier as shown in the diagram below. Please read the individual instruction manuals for all equipment being connected to the amplifier.

Do not plug in the power until after all connections have been completed.

The diagram shows an example of how to connect components to lines 1-3. Use this as an example of how to properly connect your own equipment.



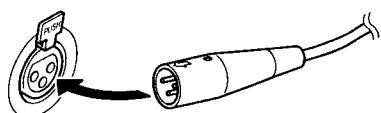
A message from the laboratory

The 'L' in the name 'L-A1' stands for laboratory. This is a mark assigned to only the most superbly engineered Kenwood products, and it has been a mark of pride since our founding. Long years of technological expertise have gone into the making of the L-A1, together with the very finest of materials, making the L-A1 the very personification of Kenwood quality.

The balance input terminals

The balance terminals provide a professional connection method for use at broadcast stations and in other professional applications. These terminals may be used for connecting any equipment with output balance terminals. To connect your equipment, use either commercially available cables or the Canon cables that come with your equipment. The end of the Canon cable without a lock switch is the end which should be connected to the input terminal (i.e., balance terminal) of the amplifier.

To remove the input terminal from the amplifier, press the terminal release lever while removing the plug.



Notes

- Insert the connecting cords firmly into their sockets. Inserting these cords loosely may result in noise or the loss of sound altogether.
- When inserting or removing the connecting cords, always be sure to first remove the power cord from its socket. Inserting or removing the connection cords with the power cord in its socket may result in the faulty operation of or damage to the amplifier.

Caution

- Do not connect any equipment with specified power requirements in excess of the maximum power displayed above the socket on the rear of the unit.

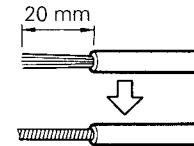
The GND (ground) terminal

The GND cord of the record player should be connected here.

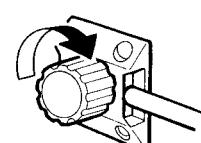
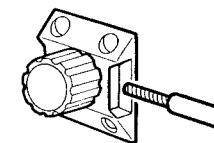
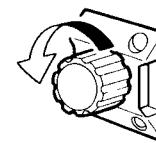
How to connect the speakers

Connect the speakers in such a way that the core of the wire does not come into contact with any terminal other than the speaker terminal.

- 1 Prepare the wire for connection.
- 2 Loosen the terminal cap.
- 3 Insert the speaker wire.
- 4 Tighten the terminal cap.



(Remove the covering to expose the core of the wire.)



Speaker impedance

Use speakers with an impedance from 4 to 16 Ω . Under no circumstances should you use speakers with an impedance less than 4 Ω .

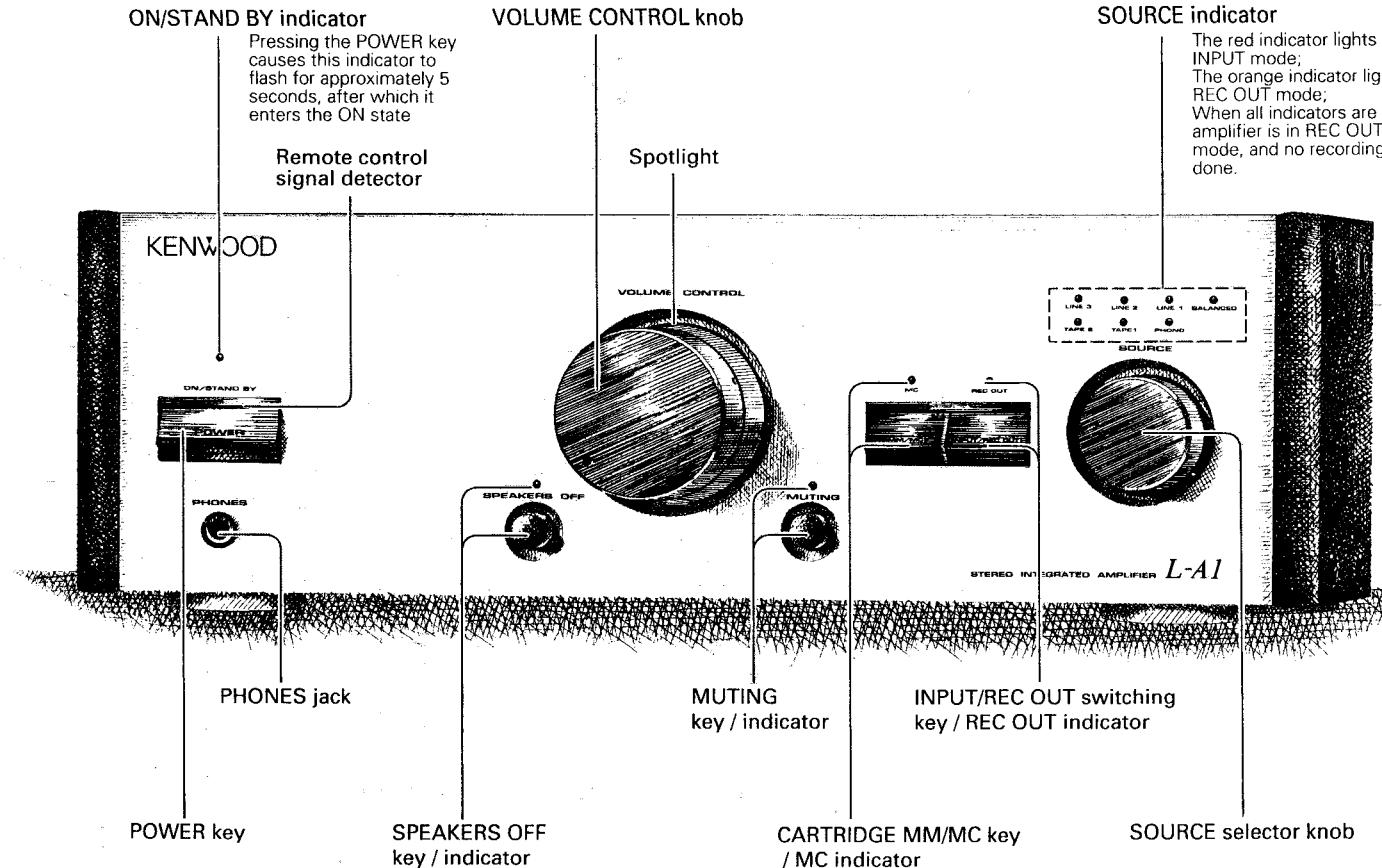
Note

- Crossing the left and right terminals, or inserting the plus and minus terminals incorrectly may result in muddled sound where instruments cannot be heard clearly, or in an unnatural, monotone sound. Please be sure to connect the speaker wires correctly.

Caution

- Do not cross the plus and minus (+ or -) or left and right (L or R) terminals when connecting the speaker cords.

Names of parts



A message from the laboratory

Class A operation of the driver stage

The power amplification stage of most amplifiers have class B operation. But in the Kenwood L-A1, in order to fully drive the final transistors, we've designed the previous drive stage to have class A operation even under a load of only 4Ω . This reduces the actual amount of distortion in the power amplification stage to levels never before realized, and allows you to enjoy clear, dynamic sound like never before.

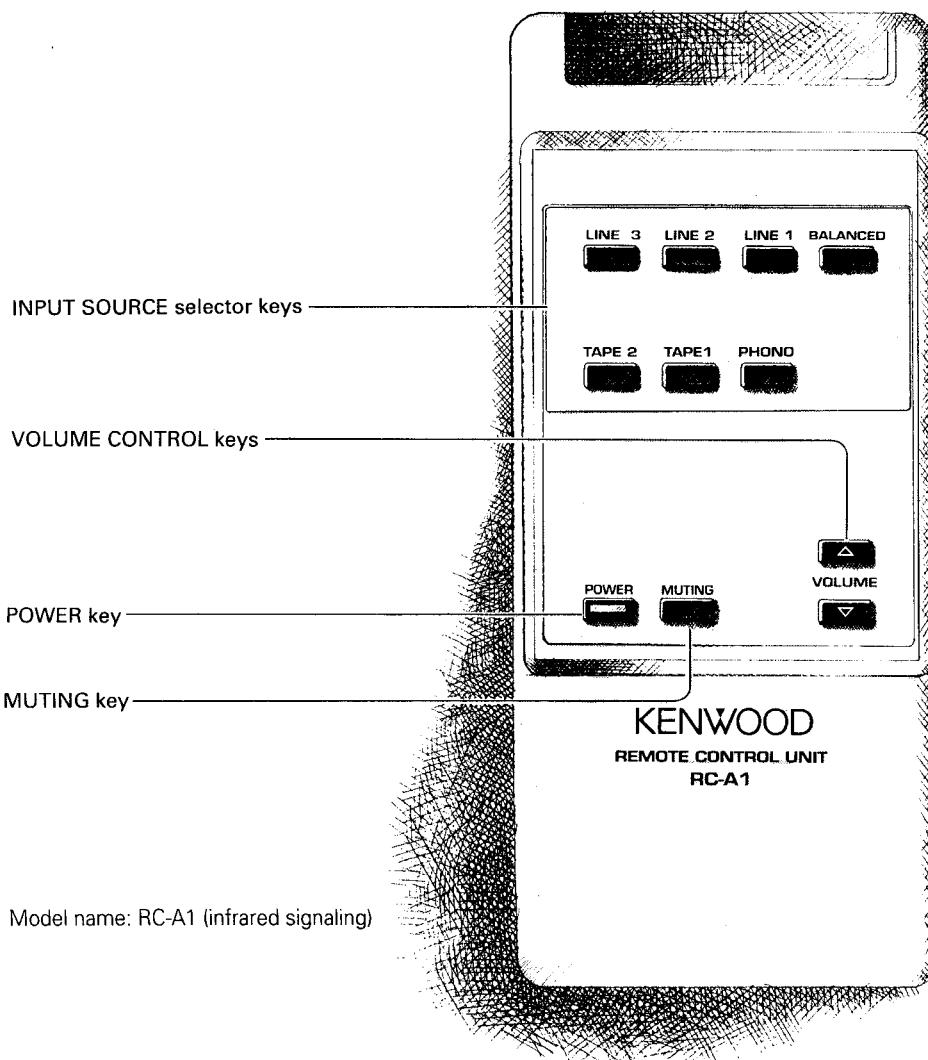
Stand by mode of POWER switch

When the power cord of this system is plugged into an AC outlet, the STAND BY indicator lights up regardless of the ON/OFF setting of the POWER switch. This indicates that a small amount of current is being supplied to the unit to back up the memory contents. This mode is referred to as the Stand By mode. While the STAND BY indicator is lit, the power of the system can be switched ON/OFF from the remote control unit.

Speaker protection circuits

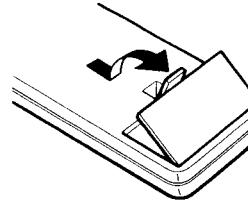
When the ON/STAND BY indicator begins flashing rapidly, it means that the plus (+) and minus (-) polarity of the speakers has been short-circuited. If this happens, press the POWER key to turn off the power, reverse the speaker connections, and press the POWER key to turn on the power once again. The amplifier should then return to normal operation.

How to use the remote control

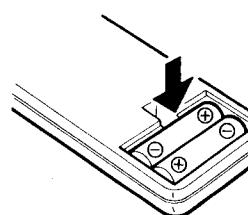


Inserting the batteries

- 1 Open the cover at the bottom of the unit.

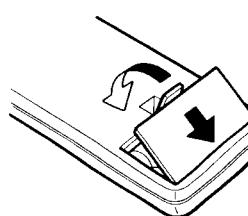


- 2 Insert batteries.



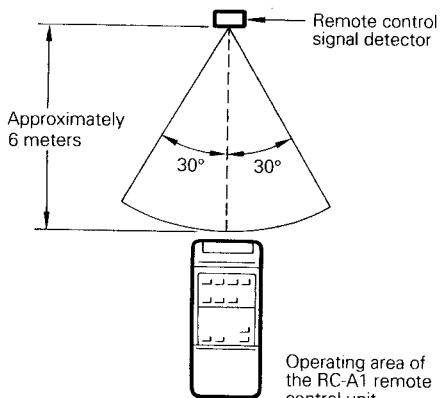
Line up two AA dry batteries (R6/SUM-3) with the plus/minus markings inside the remote control unit.

- 3 Close the cover.



Operating the remote control

Hold the remote control with the top of the unit facing the remote control signal detector and press the keys. The remote control may be operated within the area shown in the diagram below. When pressing keys continuously or in sequence, press each key firmly and wait approximately one second before pressing the next key.

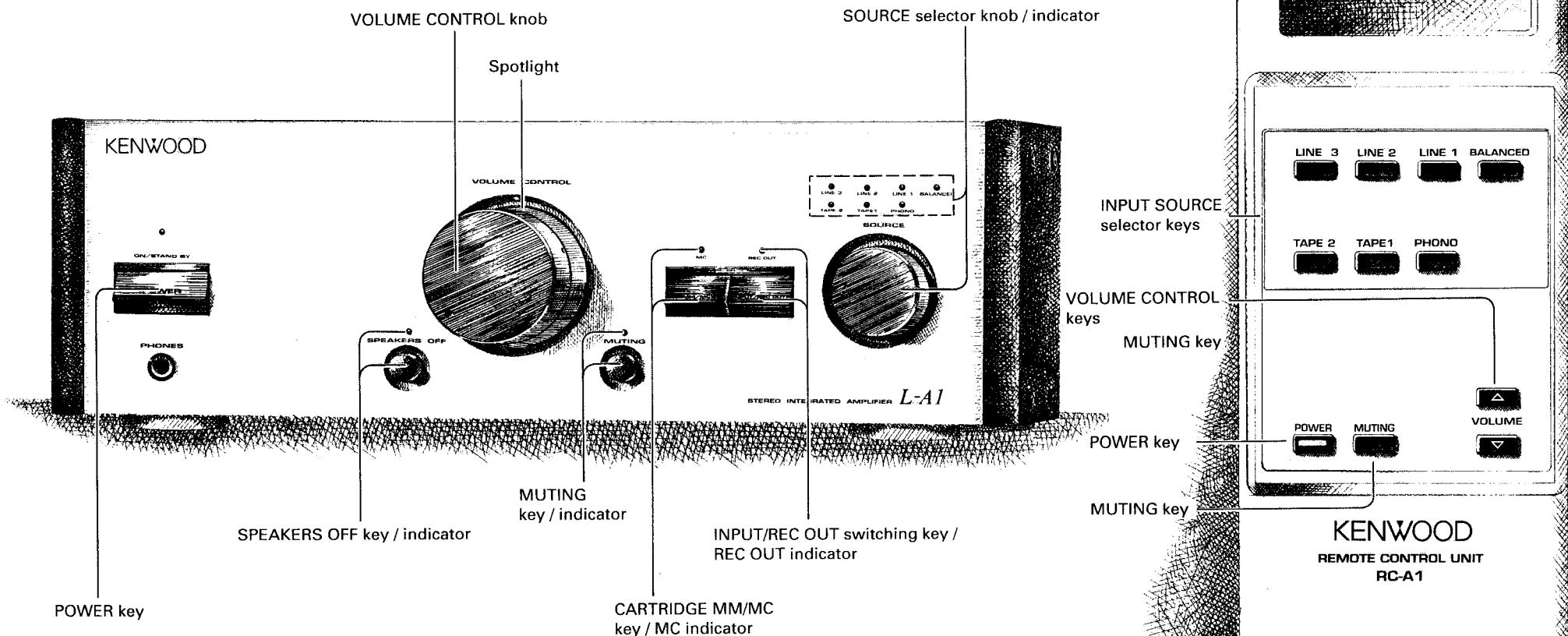


Operating area of the RC-A1 remote control unit

Notes

- The batteries included at the time of purchase may have already been used for testing the operation of the amplifier, thus may have a shorter life.
- If you find that you have to stand closer than usual to the main unit in order to use the remote control, please replace both batteries.
- Direct sunlight or high-frequency radiation from fluorescent lamps (inverter-type lamps, etc.) on the signal detector may result in the remote control failing to work properly. If this happens, please place the amplifier in a location free of such interference to ensure proper operation.

How to use the amplifier



A message from the laboratory

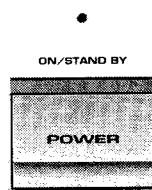
Use of a photo coupler to separate the audio and control systems

The Kenwood L-A1 amplifier has a special microcomputer located inside to handle the functioning of the remote control unit. However, this has the disadvantage of generating noise which is capable of adversely affecting the audio system. That's why we designed a layout where the power unit is separated from the power transformer and where all relay and other control signals are sent as floating transmissions routed through the photo coupler. This complete separation of the audio and control systems makes it possible to eliminate noise from this microprocessor.

■ Listening through the main source

1 Press the **POWER** key to turn on the amplifier.

▼ Main unit

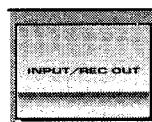


▼ Remote Control



2 Confirm the amplifier is in **INPUT** mode.

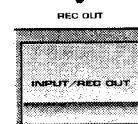
REC OUT



- If the REC OUT indicator lights up, press the **INPUT/REC OUT** switching key to turn it off.

Playing records

1 Confirm the amplifier is in **INPUT** mode.



- The REC OUT indicator is off.
- If the REC OUT indicator lights up, press the **INPUT/REC OUT** switching key to turn it off.

▼ Main unit

2 Turn the **SOURCE** selector knob to select **PHONO**.

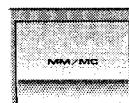


▼ Remote Control

Use the **INPUT SOURCE** selector keys to select **PHONO**.



3 Press the **CARTRIDGE MM/MC** key to select the setting that matches your cartridge.



- If you are using an MC cartridge, press the **CARTRIDGE MM/MC** key so that the MC indicator lights up.

4 Place a record on the record player and start playing.

3 Turn the **SOURCE** selector knob to select the music source.

▼ Main unit



▼ Remote Control

Use the **INPUT SOURCE** selector keys to select the music source.



- The SOURCE indicator, for the music source you have selected, lights up.

4 Insert the recording media and play from the selected source.

▼ Main unit

5 Turn the **VOLUME CONTROL** knob to adjust the loudness.



▼ Remote Control

Use the **VOLUME CONTROL** keys to adjust the loudness.



- The numbers on either side of the VOLUME CONTROL knob are for use as a guide in adjusting the volume. The current volume level is indicated by lighting up the number for which the volume is set. Turning the knob counterclockwise as far as it will go reduces the volume level to zero.

Listening through headphones

1 Insert the headphone plug into the **PHONES** jack.



2 Press the **SPEAKERS OFF** key.



- The SPEAKERS OFF indicator lights up, and no sound is output from the speakers.
- To reset, simply press the **SPEAKERS OFF** key again.

3 Turn the **VOLUME CONTROL** knob to adjust the volume.



Use the **VOLUME CONTROL** keys to adjust the volume.



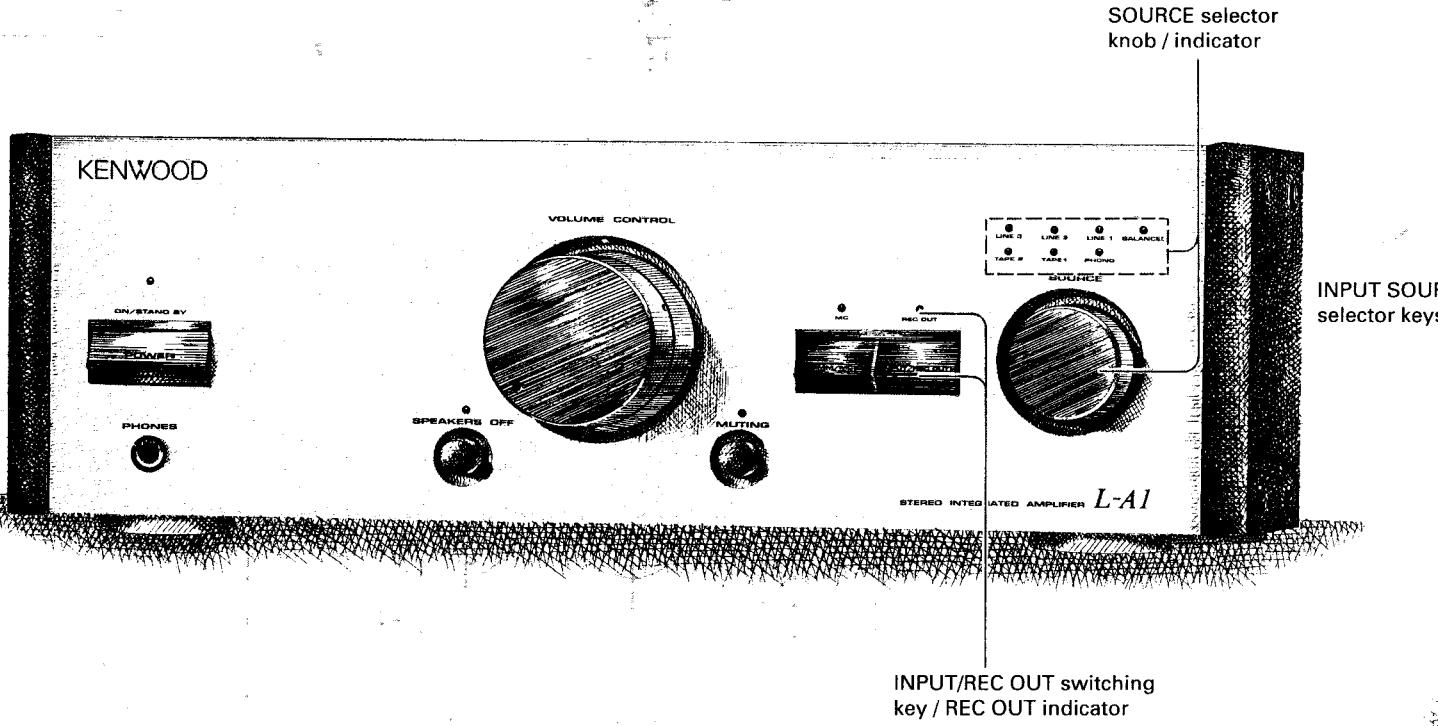
Muting the sound

1 Press the **MUTING** key.



- The MUTING indicator lights up and the sound is muted.
- To reset, simply press the **MUTING** key again.

How to record music



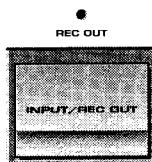
A message from the laboratory

Bus bars lower impedance in the GND terminal and power unit

The Kenwood L-A1 uses a bus bar in its input switching and output circuits. In the input switching unit, this design reduces the potential difference to zero between the GND in individual components and that in the amplifier to give you the ideal amplification. Bus bars have also been included in the plus power supply, output, and in the plus and minus power supplies of the output circuits to reduce signal loss to the lowest possible level. By designing a layout where the three bus bars in the output circuits run in parallel, we have also succeeded in reducing the amount of undesired radiation generated from the main power unit.

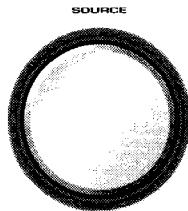
■ Selecting a music source for recording

1 Press the **INPUT/REC OUT** switching key to select REC OUT mode.



- The REC OUT indicator lights up.
- The next step must be performed within five seconds, or the amplifier will return to INPUT mode.

2 Turn the **SOURCE** selector knob to select the source from which you want to record.



- If the REC OUT indicator is off, press the **INPUT/REC OUT** switching key to turn it on.
- The SOURCE indicator for the music source you have selected will light orange for approximately five seconds before turning red (returning to INPUT mode).

3 Start the cassette tape deck to begin recording.

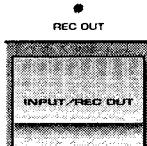
4 Start the music source from which you want to record.

Listening to a second music source while recording

1 Start recording from the source you have selected.

- Please begin recording using the procedure described above in "Selecting a music source for recording."

2 Confirm the amplifier is in **INPUT** mode.



- The REC OUT indicator is off.

3 Turn the **SOURCE** selector knob to select the music source from which you want to listen.



▼ Main unit
Use the **INPUT SOURCE** selector keys to select the music source from which you want to listen.



4 Start playing from the source you have selected.

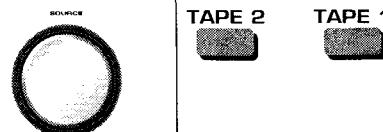
Monitoring recording

Connecting a 3-head cassette tape deck to the Kenwood L-A1 lets you compare the pre-recording and post-recording sound from the tape while recording is still in progress.

To monitor recording while it is in progress, follow the procedure below.

1 Connect a 3-head cassette tape deck to either the **TAPE 1** or **TAPE 2** terminal.

▼ Main unit
2 Turn the **SOURCE** selector knob to select **TAPE 1** (or if the deck is connected to **TAPE 2**, then select **TAPE 2**).



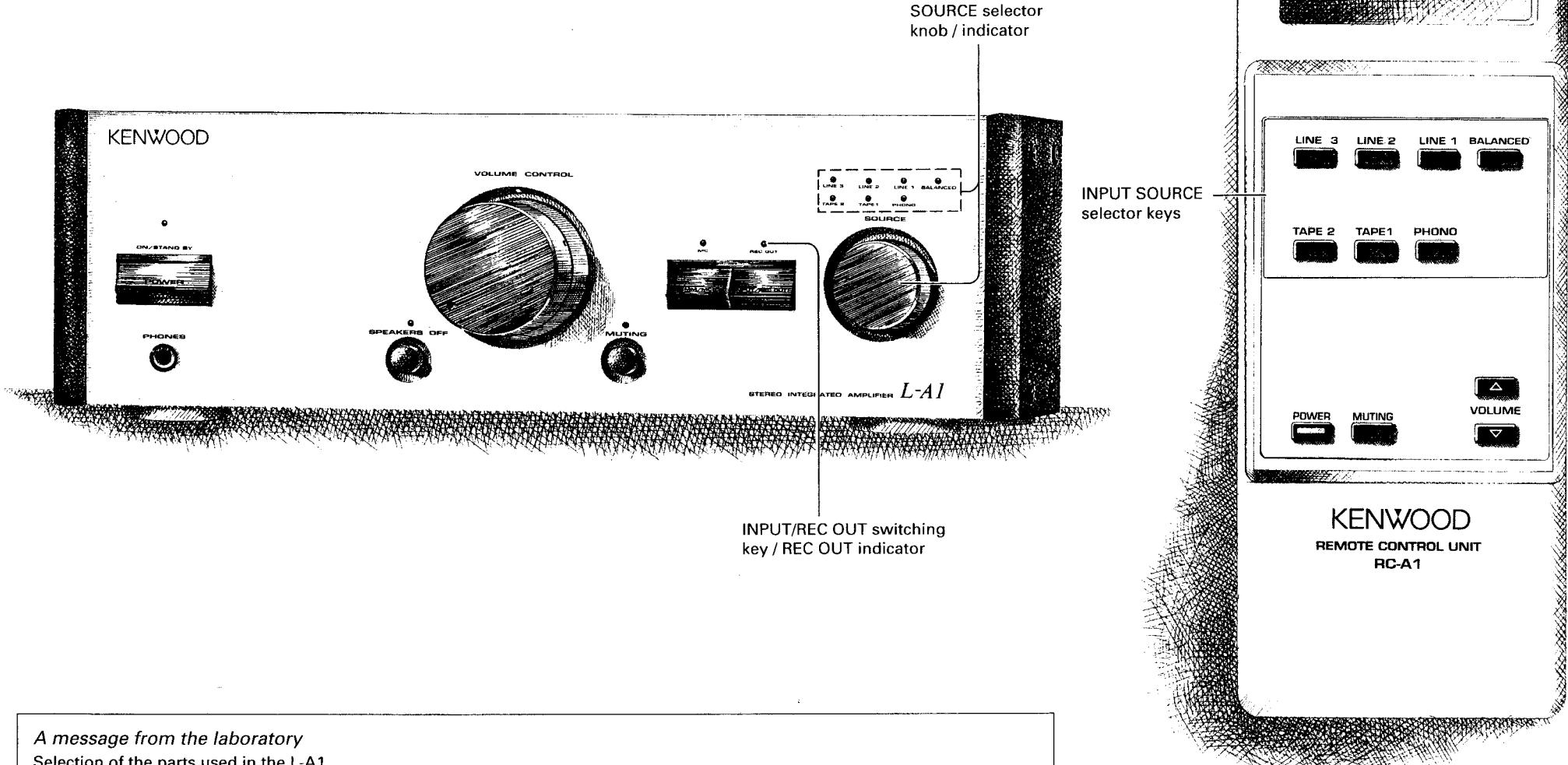
▼ Remote Control
Use the **INPUT SOURCE** selector keys to select either **TAPE 1** or **TAPE 2**.

3 Begin playing from the selected recording source.

- Begin recording by following the procedure described above in "Selecting a music source for recording."

4 Switch the **MONITOR** switch of the 3-head cassette tape deck.

How to record music



A message from the laboratory

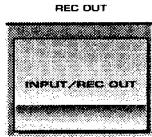
Selection of the parts used in the L-A1

We have carefully selected every one of the parts used in the Kenwood L-A1 to ensure that they all offer excellent sound and performance with a reliability that ensures the quality will last. We checked the feel of every control before making our decision. We even requested one manufacturer to design an entirely new knob for use in the source selection rotary switch, having several different prototypes made and selecting the one that we knew would offer you the surest feel.

■ Dubbing music (from TAPE 1 to TAPE 2)

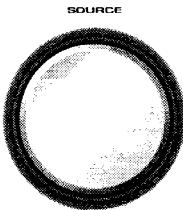
*To dub from TAPE 2 to TAPE 1, follow the steps in parentheses below.

1 Press the **INPUT/REC OUT** switching key to select REC OUT mode.



- The REC OUT indicator lights up.
- The next step must be performed within five seconds or the amplifier will return to INPUT mode.

2 Turn the **SOURCE** selector knob to select **TAPE 1 (TAPE 2)**.



3 Start recording on cassette tape deck 2 (cassette tape deck 1).

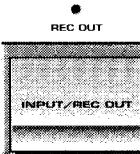
4 Start the cassette in cassette tape deck 1 (cassette tape deck 2).

Listening to a second music source while dubbing

1 Begin dubbing.

- Begin recording using the procedure described above in "Dubbing music."

2 Confirm the amplifier is in **INPUT** mode.



- The REC OUT indicator is off.

3 Turn the **SOURCE** selector knob to select the music source to which you want to listen.



▼ Main unit
Use the **INPUT/SOURCE** selector keys to select the music source from which you want to listen.



4 Start playing from source you have selected.

Troubleshooting

Before you contact your service representative, check the following list.

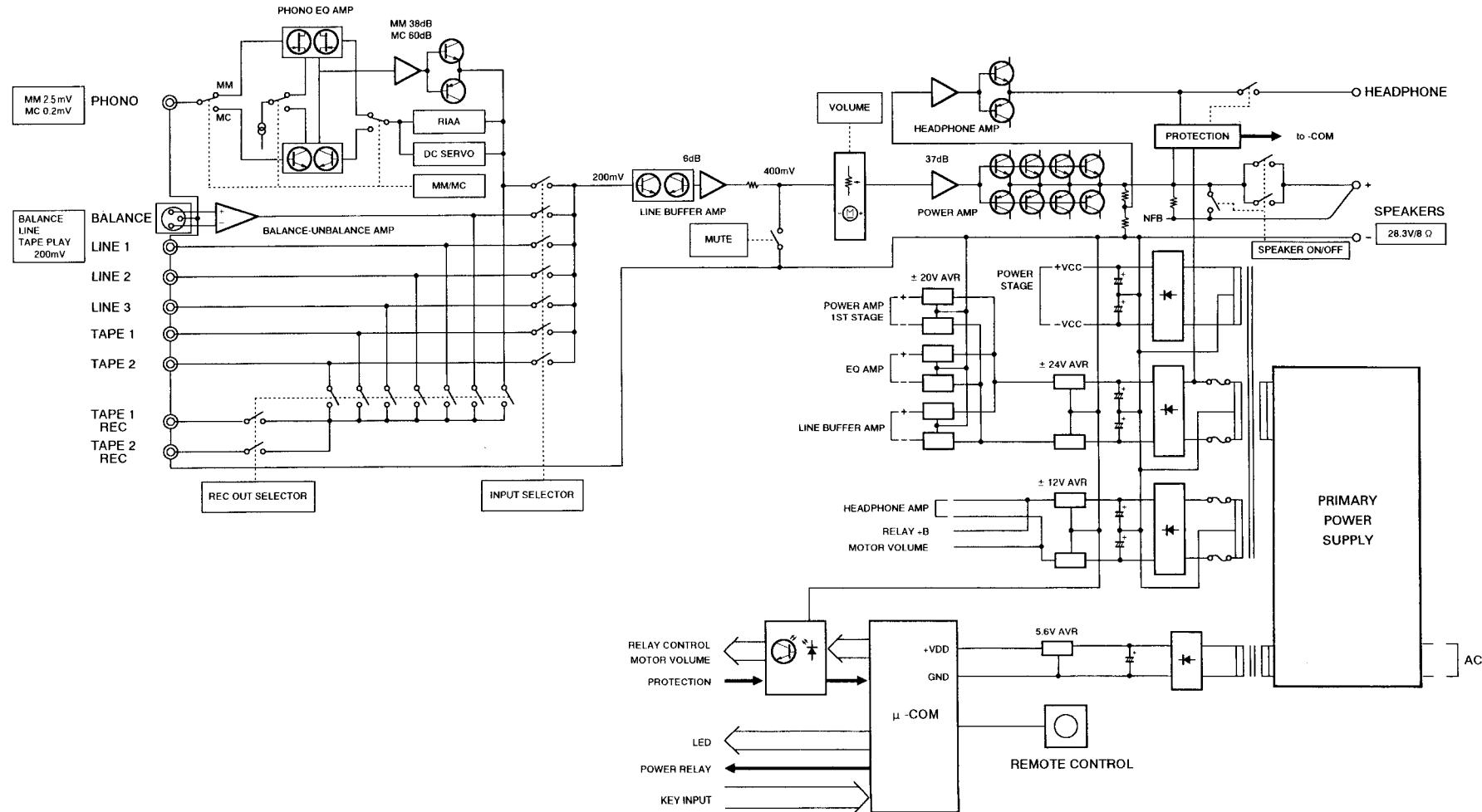
MAIN UNIT	PROBLEM	POSSIBLE CAUSES	SOLUTIONS
	No sound	<ul style="list-style-type: none"> SPEAKERS OFF indicator is lit. Speaker cords aren't properly connected. Volume has been turned down to zero. Amplifier muting is on and the MUTING indicator is lit. Audio cords are crossed or aren't properly connected. The shorting pin is still connected to the REC terminal. 	<ul style="list-style-type: none"> Press the SPEAKERS OFF key to turn off the SPEAKERS OFF indicator. Reconnect the speaker cords according to the procedure described in "How to set up your new amplifier" on page 8. Adjust the volume. Press the MUTING key to turn off the MUTING indicator. Check that the audio cords are properly connected. Remove the shorting pin from the terminal.
	ON/STAND BY indicator is blinking rapidly and there is no sound from the stereo	<ul style="list-style-type: none"> Speaker cords are short-circuited. 	<ul style="list-style-type: none"> Press the POWER key to turn off the power before replacing the speaker cords in their correct places. Then press the POWER key again to turn the power back on.
	No sound from one of the speakers	<ul style="list-style-type: none"> Speaker cord is loose. 	<ul style="list-style-type: none"> Reconnect the speaker cords according to the procedure described in "How to set up your new amplifier" on page 8.
	You can hear a strange sound when the SOURCE selector knob (or the SOURCE selector keys) is set to PHONO	<ul style="list-style-type: none"> The record player's audio cord is not firmly inserted into the PHONO jack. The record player's grounding line is not properly connected. 	<ul style="list-style-type: none"> Insert the audio cord firmly into the PHONO jack. Connect the grounding line to the GND terminal on the rear of the amplifier.
	You get different volume levels from the tuner and the record player	<ul style="list-style-type: none"> The output from the tuner is different from the output of the record player. The MM/MC mode is improperly set. 	<ul style="list-style-type: none"> Adjust the volume. Press the CARTRIDGE MM/MC key to properly set the MM/MC mode.

REMOTE CONTROL UNIT	PROBLEM	POSSIBLE CAUSES	SOLUTIONS
	Remote control unit doesn't work	<ul style="list-style-type: none"> Batteries are dead. You are too far away from the main unit or you are trying to operate the remote control at too sharp an angle. Also check that nothing is in the way. 	<ul style="list-style-type: none"> Replace both batteries. Try using the remote control again, but within the area described on page 11.

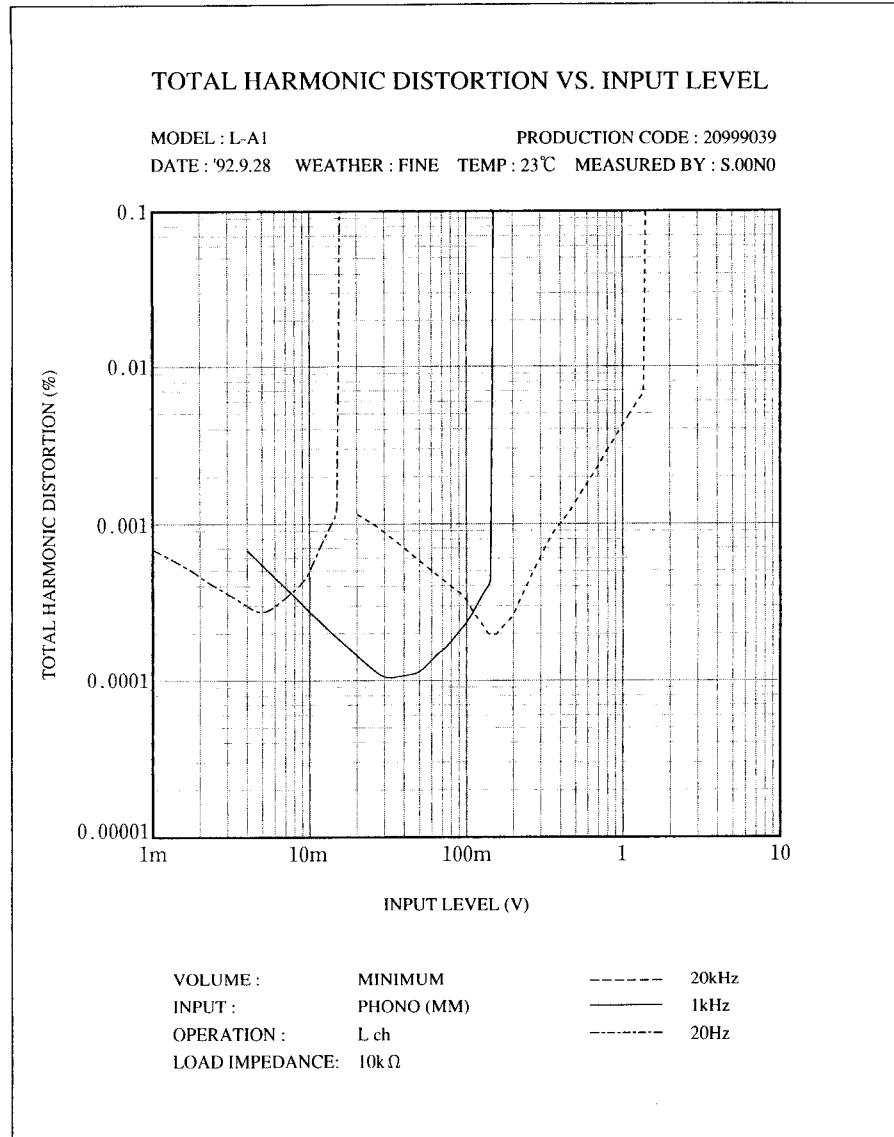
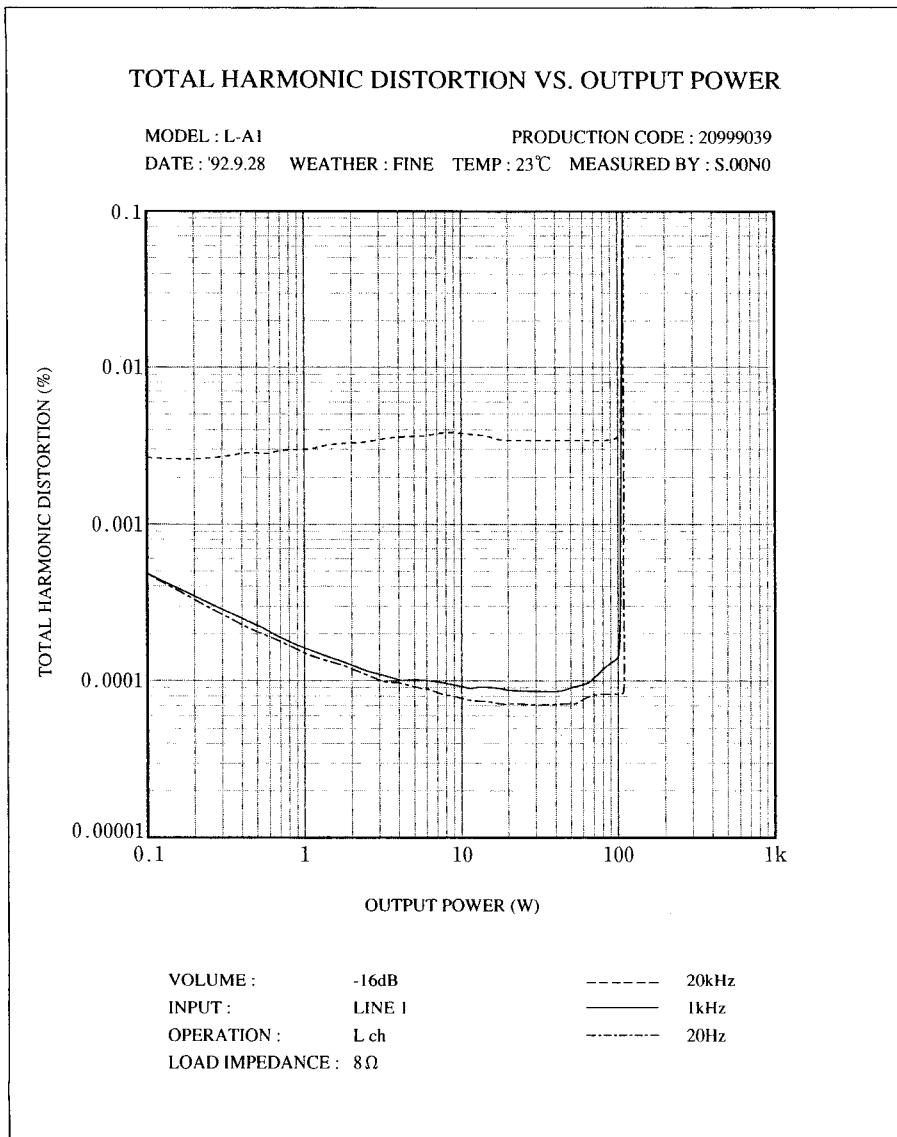
Notes

- The Kenwood L-A1 uses a microprocessor that may be subject to external noise or interference which would cause the L-A1 to function improperly. If this happens, remove the power cord from its socket and try the amplifier once more.
- Do not use glues and fixatives to restore electrical connections as they may result in damage to your amplifier. Solutions containing oils are particularly dangerous, as they may cause the distortion of plastic parts.

Block diagram



Characteristics Charts



Specifications

Characteristics

For U.K. and Europe

Continuous rated power output	
(DIN) 1 kHz, at 8 Ω	120 W + 120 W
at 4 Ω	200 W + 200 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7 % T.H.D.	
at 8 Ω	120 W + 120 W
at 4 Ω	200 W + 200 W
Dynamic power	140 W (8 Ω) 260 W (4 Ω) 420 W (2 Ω)
Signal to noise ratio	
PHONO (MM)	92 dB (IHF '66) 87 dB (IHF '78)
PHONO (MC)	78 dB (IHF '66) 84 dB (IHF '78)
LINE (1, 2, 3)	110 dB (IHF '66) 100 dB (IHF '78)
BALANCE	95 dB (IHF '66) 100 dB (IHF '78)
PHONO (MM)	73 dB (DIN, 50 mW output)
LINE (1, 2, 3)	75 dB (DIN, 50 mW output)
LINE (BALANCED)	75 dB (DIN, 50 mW output)

For other countries

Continuous rated power output	
(FTC) 100 watts per channel minimum RMS, both channels driven, at 8 Ω from 20 Hz to 20 kHz with no more than 0.005% total harmonic distortion.	
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7 % T.H.D.	
at 8 Ω	120 W + 120 W
at 4 Ω	200 W + 200 W
Dynamic power	140 W (8 Ω) 260 W (4 Ω) 420 W (2 Ω)
Signal to noise ratio	
PHONO (MM)	92 dB (IHF '66) 87 dB (IHF '78)
PHONO (MC)	78 dB (IHF '66) 84 dB (IHF '78)
LINE (1, 2, 3)	110 dB (IHF '66) 100 dB (IHF '78)
LINE (BALANCED)	95 dB (IHF '66) 100 dB (IHF '78)

Common

Damping factor	1000 (50 Hz)
Total harmonic distortion	0.005 % (20 Hz ~ 20 kHz, 100 W, 8 Ω) 0.001 % (1 kHz, 100 W, 8 Ω)
Frequency response	
LINE (1, 2, 3)	3 Hz ~ 100 kHz, +0 dB, -3 dB
PHONO 'RIAA' response	20 Hz ~ 20 kHz, +0.5 dB, -0.5 dB
Maximum input level	
PHONO (MM)	150 mV, 0.03 % T.H.D. at 1 kHz
PHONO (MC)	12 mV, 0.03 % T.H.D. at 1 kHz
Input sensitivity/impedance	
PHONO (MM)	2.5 mV/47 k Ω
PHONO (MC)	200 μ V/100 Ω
LINE (1, 2, 3)	200 mV/33 k Ω
LINE (BALANCED)	200 mV/30 k Ω
Output level/impedance	
TAPE REC	200 mV/430 Ω

General

Power consumption	400 W
AC outlet	
SWITCHED	1: (200 W max.)
Dimensions	W: 476 mm H: 163 mm D: 469 mm
Weight (net)	27.6 kg

Please note that product specifications and design may be subject to change without notice.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model _____ Serial Number _____